

Alexander (Zander) Kelley

CONTACT awk2@illinois.edu

EDUCATION **University of Illinois at Urbana-Champaign**

Ph.D Student: August 2017 - Present
Advisor: Michael A. Forbes

Texas A&M University

August 2013 - May 2017
B.S. in Computer Science, Honors Distinction
B.S. in Mathematics, Honors Distinction
Minor in Physics

PUBLICATIONS Zander Kelley, Raghu Meka, **Random restrictions and PRGs for PTFs in Gaussian Space**. In 37th Computational Complexity Conference, 2022.

Zander Kelley, **An improved derandomization of the switching lemma**. In Proceedings of the 53rd Annual ACM SIGACT Symposium on Theory of Computing, 2021.

Michael Forbes, Zander Kelley, **Pseudorandom generators for read-once branching programs, in any order**. In Foundations of Computer Science (FOCS), 2018 IEEE 59th Annual Symposium on. IEEE, 2018.

Thomas Browning, Max Hopkins, and Zander Kelley, **Doppelgangers: the Ur-operation and posets of bounded height**. In proceedings of the 30th international conference on Formal Power Series and Algebraic Combinatorics (FPSAC'18).

Zander Kelley, **Roots of sparse polynomials over a finite field**, In Proceedings of the Twelfth Algorithmic Number Theory Symposium (ANTS-XII, University of Kaiserslautern, September 2016). LMS Journal of Computation and Mathematics, 19(A), pp. 196–204.

Zander Kelley, Sean W. Owen, **Estimating the number of roots of trinomials over finite fields**, In Journal of Symbolic Computation, Volume 79, Part 1, March–April 2017, Pages 108–118, ISSN 0747-7171.

TEACHING
EXPERIENCE **Graduate Teaching Assistant**
University of Illinois Urbana-Champaign

Fall 2018 - Present

- CS473: Algorithms
- CS374: Introduction to Algorithms
- CS579: Computational Complexity

Undergraduate Teaching Assistant
Texas A&M University

Fall 2015

- MATH170: Calculus Retention Lab

PROFESSIONAL
ACTIVITIES

Reviewer

- STOC 2023
- CCC 2022
- STOC 2022
- STOC 2020
- ICLR 2020
- FOCS 2019
- Theory of Computing (journal)

AWARDS AND
HONORS

- 2017 Undergraduate Research Excellence Award
Texas A&M Department of Computer Science
- 2017 Computer Science Excellence Fellowship
UIUC Department of Computer Science
- 2015 Classroom Excellence Award – Top Student in Math 416H Honors Algebra II
Texas A&M Department of Mathematics
- 2014 Classroom Excellence Award – Top Student in Math 409 Advanced Calculus
Texas A&M Department of Mathematics